REMARKS

In accordance with the foregoing, claims 1, 3, 12, 13, 19, and 25 are amended, and new claim 26 is added. Claims 1-26 are pending and under consideration.

Claims 8-11

In item 7, the Office Action notes that claims 8-11 are in condition for allowance.

Rejection of Claims 1, 3-5, 12-14, 19, 24, and 35 Under 35 U.S.C. §112, second paragraph

The Office Action rejects claims 1, 3- 5, 12-14, 19, 24, and 25 under 35 U.S.C. §112, second paragraph as being indefinite. Applicant amends claims 1, 3, 12, 13, 19, and 25 to obviate this rejection. Accordingly, withdrawal of this objection is respectfully requested.

Rejection of Claims 1and 3-7, 13, 14, and 17-25 Under 35 U.S.C. §103(a)

The Office Action rejects claims 1, 3-7, 13, 14, and 17-25 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 6,160,777 issued to Kim in view of U.S. Patent 6,519,715 issued to Takashi et al. (hereinafter referred to as "Takashi"). This rejection is respectfully traversed.

Kim and Takashi, taken separately or in combination, do not disclose, teach, or suggest at least, "A block synchronization detection apparatus in a system having a decoder that decodes an error correction code (ECC) ... comprising: an operator performing an operation on a predetermined last sector number, an n-th sector number, and an (n-1)-th sector number contained in a block, based on a predetermined operation relation; and a comparator ... outputting the result of the comparison as a block synchronization signal," as recited in claim 1.

In item 5 on page 3, the Office Action asserts that col. 3, lines 32-51 of Kim discloses the operator. Applicant respectfully traverses this assertion.

Kim discloses an apparatus for generating a block synchronous signal for a digital versatile disc (DVD). An error correction code (ECC) block is configured so that a reed-solomon product code (RSPC) decoder 20 can be used for the corrected error correction in response to a sector synchronous signal input after being reset. A sector delay 50 performs a sector delay operation for synchronizing data inputted after a sector head is detected. An ID error correction code (IEC) decoder/block synchronous signal generator circuit 60 detects the sector head of an ECC from data decoded by the RSPC decoder 20 and generates the block synchronous signal in accordance with the detected ECC head.

Although Kim discloses generation of a block synchronous signal in accordance with the ECC head, Kim does not disclose, teach, or suggest "an operator performing an operation on a predetermined last sector number, an n-th sector number, and an (n-1)-th sector number contained in a block, based on a predetermined operation relation," as recited in claim 1. Kim dose not disclose, teach or suggest performing an operation on a (1) predetermined last sector number, (2) an n-th sector number, and (3) an (n-1)-sector number based on a predetermined operation relation. Kim does not single out these sector numbers or any operation performed based on the predetermined operation relation.

Moreover, in item 5 on page 3, the Office Action notes, Kim does not explicitly disclose "a comparator comparing a result of the operation output from the operator with a predetermined threshold value and outputting the result of the comparison as a block synchronization signal," as recited in claim 1.

The Office Action appears to assert that col.10, line 62 through col. 11, line 12 of Takashi discloses a comparator 166 comparing the result of the operation with a predetermined threshold value. However, neither Kim nor Takashi discloses the "result of the operation output from the operator," as recited in claim 1.

Accordingly, claim 1 is patentably distinguishable over the cited references.

Claims 2-7 depend from claim 1 and include all of the features of claim 1. Therefore, for at least these reasons, claims 2-7 are also patentably distinguishable over the cited references.

Similarly, Kim and Takashi, taken separately or in combination, do not disclose, teach, or suggest at least, "performing an operation on a predetermined last sector number, an n-th sector number, and an (n-1)-th sector number contained in a block; setting a comparison relation between a result of the operation and a predetermined threshold value...," as recited in claim 13. Therefore, claim 13 is patentably distinguishable over the cited references.

In addition, in item 6 on page 4, the Office Action implies that Kim and Takashi do not disclose, "the comparator compares the result of the operation with the predetermined threshold value based on a comparison relation set depending on whether sector numbers contained in the block are sequentially increasing or decreasing," as recited in claim 2.

For similar reasons, Kim and Takashi, taken separately or in combination, do not disclose, teach, or suggest at least, "setting a comparison relation between a result of the operation and a predetermined threshold value depending on whether sector numbers contained

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in the block are sequentially increasing or decreasing," as recited in claim 13. Therefore, claim 13 is also patentably distinguishable from the combination of Kim and Takashi.

Claims 14-18 depend from claim 13 and include all of the features of claim 13. Therefore, for at least these reasons claims 14-18 are also patentably distinguishable over the cited references.

Similarly, Kim and Takashi, taken separately or in combination do not disclose, teach, or suggest at least, "an operator performing an operation on a predetermined last sector number, an n-th sector number, and an (n-1)-th sector number contained in a block, based on a predetermined operation relation," as recited in claim 25.

As discussed above, Kim and Takashi do not disclose the operator or predetermined operation relation. Therefore, Takashi's comparator 166 can not perform the proper comparison. Accordingly, claim 25 is patentably distinguishable over the cited references.

Kim and Takashi, taken separately or in combination, do not disclose, teach, or suggest "a first block detection synchronization unit" and "a second block synchronization detection unit," as recited in claim 19. As indicated in item 7 of the Office Action, the cited references do not disclose "a second block synchronization detection unit." Therefore, for at least these reasons, claim 19 is patentably distinguishable from the cited references.

Claims 20-24 depend from claim 19 and include all of the features of claim 19. Therefore, for at least these reasons, claims 20-24 are also patentably distinguishable over the cited references.

Accordingly, withdrawal of this rejection is respectfully requested.

Rejection of Claims 2 Under 35 U.S.C. §103(a)

The Office Action rejects claim 2 under 35 U.S.C. §103(a) as being unpatentable over Kim in view Takashi, and further in view of U.S. Patent 6,747,942 issued to Tanoue et al. (hereinafter referred to as "Tanoue"). This rejection is respectfully traversed.

Kim, Takashi, and Tanoue, taken separately or in combination, do not disclose, teach, or suggest at least, "A block synchronization detection apparatus in a system having a decoder that decodes an error correction code (ECC) ... comprising: an operator performing an operation on a predetermined last sector number, an n-th sector number, and an (n-1)-th sector number contained in a block, based on a predetermined operation relation; and a comparator ... outputting the result of the comparison as a block synchronization signal," as recited in claim 1

Tanoue does not cure the deficiencies of Kim and Takashi.

Claim 2 depends from claim 1 and includes the features of claim 1. Therefore, for at least these reasons claim 2 is also patentably distinguishable from the cited references.

Similarly, Kim, Takashi, and Tanoue, taken separately or in combination, do not disclose, teach, or suggest at least, "performing an operation on a predetermined last sector number, an n-th sector number, and an (n-1)-th sector number contained in a block; setting a comparison relation between a result of the operation and a predetermined threshold value...," as recited in claim 13. Therefore, claim 13 is patentably distinguishable over the cited references.

Accordingly, withdrawal of this rejection is respectfully requested.

<u>Objection to Claims 15 and 16</u>

The Office Action objects to claims 15 and 16 as being dependent upon a rejected base claim. Applicant respectfully submits that the amendments to claim 13 obviate the 35 U.S.C. §112, second paragraph rejection and that claim 13 is patentably distinguishable over the cited references as discussed above. Accordingly, withdrawal of this objection is respectfully requested.

Summary

Claims 1-26 are pending and under consideration. It is respectfully submitted that none of the references taken alone or in combination disclose the present claimed invention.

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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